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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,621	07/25/2006	Hubert Moriceau	9905-37 (BIF116044/US)	2319
90678	7590	11/23/2010		
Commissariat a l'Energie Atomique/BHGL P.O. Box 10395 Chicago, IL 60610			EXAMINER PATEL, REEMA	
			ART UNIT	PAPER NUMBER
			2812	
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			11/23/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,621	Applicant(s) MORICEAU ET AL.	
	Examiner REEMA PATEL	Art Unit 2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8 and 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/3/10, 10/1/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to an amendment filed 7/7/10.

Information Disclosure Statement

1. The information disclosure statements (IDS) were submitted on 9/3/10 and 10/1/10. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Drawings

2. The new drawing Fig. 7 submitted 7/7/10 is objected to under 35 U.S.C. 132 and 37 CFR 1.121 as introducing new matter not supported by the original disclosure. The original disclosure does not reasonably convey to a designer of ordinary skill in the art that applicant was in possession of the amended subject matter at the time the application was filed. See *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981).

Specifically, there is no support in the original disclosure of a non-continuous sacrificial layer 3 with a surface 2 of plate 1 exposed.

To overcome this objection, applicant may attempt to demonstrate that the original disclosure establishes that he or she was in possession of the amended subject matter or make the sacrificial layer completely cover the surface plate 1 (as presented by the amendment to the drawings 7/11/08).

Specification

3. The amendment filed 7/7/10 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Figure 7 of the Drawings illustrates removal of the sacrificial layer (3) to expose the roughened plate surface (2). There is insufficient support for this amendment to the drawings.

4. In the Remarks (7/7/10), the Applicant states that the amendment “merely recognizes the additional figure in the specification text that describes the condition illustrated in Fig. 7” (Remarks, p. 7). However, the figure which it describes, the amended Fig. 7 (presented on 10/29/09 and 7/7/10), contains new subject matter. By implication, the Specification also contains new subject matter.

5. Applicant argues that the original claims in the priority French patent application disclose:

“b) a sacrificial layer (3; 8) is produced on at least a portion of the surface (2) of the first plate (1) and/or the surface (7) of the second plate (5)” (Remarks, p. 8)

6. Applicant asserts that this claim language “recognize[s] that only a portion of the sacrificial layer can be produced on the first or second plate.” The examiner does not find this persuasive. The original claim suggests that the sacrificial layer is produced on “at least a portion” (see emphasis). However, the applicant appears to be confusing a sufficient for a necessary condition. “At least a portion” does not equate to “only a

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portion” since “at least a portion” does not foreclose sacrificial layer on the entire first or second plate.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 5-8, and 11-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

9. Claim 1, amended 11/19/08, still contains the limitation that the sacrificial layer is partly eliminated to "expose the surface portion such that the surface portion at least partially faces the second plate." As applicants point out in page 6 of the Remarks (11/18/08), the applicants' Specification discloses:

“a portion of the intermediate sacrificial layer between the two plates may be eliminated, for example, to obtain two facing surfaces at least one of which is appropriately structured. This prevents the two surfaces sticking together following movement of the two substrates toward each other.” (Substitute Specification, p 7, lines 20-25).

10. While this excerpt provides support for at least partially eliminating the sacrificial layer so that the plates face each other, there is no section in this excerpt or anywhere else in the Written Description or drawings that discloses the surface portion (roughened side of first plate) is exposed. In a semiconductor fabrication context, an

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“exposed” structure or layer is usually open to the air or other environment. In the instant invention, Figure 4 illustrates partially eliminating the sacrificial layer but does not disclose that the surface portion of the first plate is in any way exposed since there is a layer of sacrificial layer over the entire surface portion of the first plate. Claims 5-8 and 11-26 inherit the 35 U.S.C. 112 rejection based on their dependency on claim 1.

11. Regarding arguments that Fig. 4 does not foreclose on an embodiment in which the sacrificial layer 3 is partially removed to expose the underlying surface prior to bonding the first and second plates together, the examiner’s position is that Fig. 4 (as in the originally submitted application) discloses what appears to have been in possession of the inventor at the time of filing. The function of the written description requirement is to ensure that the inventor had possession of, as of the filing date of the application relied on, the specific subject matter later claimed by him or her (MPEP 2161.01). While Fig. 4 may not foreclose per se on an embodiment in which the sacrificial layer 3 is partially removed to expose the underlying surface prior to bonding the first and second plates together, there is nothing else in the drawings or specification as originally filed which would support such an embodiment either.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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13. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al. (U.S. 6,156,215; "Shimada").

14. Claim 26 is a product-by-process claim and as such, will be examined in accordance with the structural limitations implied by the method steps in claim 1, the method claim upon which it depends (MPEP 2113).

15. Regarding claim 26, Shimada discloses in Figures 1A-1F, a first plate (1) with a surface portion (3) having a roughness such that the surface portion is incapable of sticking to a surface of a second plate (8), wherein the surface portion of the first plate is exposed and at least partially faces and is in close proximity to the second plate (Fig. 1E). Method claim 1 includes forming a sacrificial layer and at least partly eliminating the sacrificial layer. Hence, if this sacrificial layer is entirely removed, then there is no sacrificial in the final stacked structure.

Response to Amendment

16. The declaration under 37 CFR 1.132 filed 7/7/10 is insufficient to overcome the rejection of claims 1, 5-8, 11-26 based upon the 35 U.S.C. 112 rejections and Shimada et al. (U.S. 6,156,215; "Shimada") as set forth in the last Office action because: While affidavits or declarations which state only conclusions may have some probative value, such an affidavit or declaration may have little weight in light of all the evidence of record in the application (MPEP 716.01(c)). While the application may talk of preventing sticking of freed structures, the drawings and specification as originally filed of the instant application do not disclose that a surface portion of a first or second plate is exposed, as added in the 11/08/08 amendment.

Response to Arguments

17. Applicant's arguments filed 7/7/10 have been fully considered but they are not persuasive.

18. Regarding the objection to the Specification, Applicant argues that the original claims in the priority French patent application disclose:

“b) a sacrificial layer (3; 8) is produced on at least a portion of the surface (2) of the first plate (1) and/or the surface (7) of the second plate (5)” (Remarks, p. 8)

19. Applicant asserts that this claim language “recognize[s] that only a portion of the sacrificial layer can be produced on the first or second plate.” The examiner does not find this persuasive. The original claim suggests that the sacrificial layer is produced on “at least a portion” (see emphasis). However, the applicant appears to be confusing a sufficient for a necessary condition. “At least a portion” does not equate to “only a portion” since “at least a portion” does not foreclose sacrificial layer on the entire first or second plate. Therefore, the original claims do *not* recognize that only a portion of the sacrificial layer can be produced on the first or second plate.

20. Regarding the 35 U.S.C. 112 rejections of claims 1, 5-8, and 11-26 and arguments that Fig. 4 does not foreclose on an embodiment in which the sacrificial layer 3 is partially removed to expose the underlying surface prior to bonding the first and second plates together, the examiner's position is that Fig. 4 (as in the originally submitted application) discloses what appears to have been in possession of the invention at the time of filing. The function of the written description requirement is to ensure that the inventor had possession of, as of the filing date of the application relied

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on, the specific subject matter later claimed by him or her (MPEP 2161.01). While Fig. 4 may not foreclose per se on an embodiment in which the sacrificial layer 3 is partially removed to expose the underlying surface prior to bonding the first and second plates together, there is nothing else in the drawings or specification as originally filed which would support such an embodiment either.

21. Regarding the claim 26 rejection, Applicant argues that Shimada et al. (U.S. 6,156,215; "Shimada") does not anticipate this claim because it does not "suggest or disclose at least partially removing either the peeling layer or the light blocking layer" (Remarks, p. 11). The examiner does not find this persuasive. Claim 26 is a product-by-process claim and as such, is examined in accordance with the structural limitations implied by the method steps in claim 1, the method claim upon which it depends (MPEP 2113). In this instance, the Applicant is arguing that Shimada fails to disclose a particular method limitation but this is inapplicable since Claim 26 is examined with regards to the *structural limitations* (emphasis added) implied by the method steps (in claim 1). As examiner stated above, method claim 1 includes the step of forming a sacrificial layer and at least partly eliminating the sacrificial layer. Hence, the examiner posits if this sacrificial layer is entirely removed, then there is no sacrificial layer in the final stacked structure.

22. Furthermore, applicant argues that in the context of claim 1 "the term "face" necessarily means that the roughed portion of the first plate is opposite to the second plate, with no intervening structure between the roughed portion of the first plate and the second plate" (Remarks, p. 11). The Examiner disagrees with this narrow interpretation

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of the word "face" and in the course of the broadest reasonable interpretation, interprets the word "face" to mean overlap but not necessarily with the limitation that there are no intervening layers. As stated in a previous office action, the Examiner still does not find adequate support (over Applicant's remarks 9/11/09) since something can be set over or on the other side of another thing with intervening materials in between.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REEMA PATEL whose telephone number is (571)270-1436. The examiner can normally be reached on M-F, 8:00-4:30 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on (571)272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. P./
Examiner, Art Unit 2812
11/9/10

/Charles D. Garber/

Supervisory Patent Examiner, Art Unit 2812